ABSTRACT OF THE DISCLOSURE

A semiconductor device with excellent heat dissipation characteristics that can achieve a high reliability when mounted in electronic equipment such as a cellular phone or the like and a method for manufacturing the same are provided. The semiconductor device includes a substrate, a plurality of semiconductor chips mounted on the substrate by stacking one on top of another, and an encapsulation resin layer made of encapsulation resin. Among the plurality of semiconductor chips, a first semiconductor chip as an uppermost semiconductor chip is mounted with a surface thereof on which a circuit is formed facing toward the substrate, and the encapsulation resin layer is formed so that at least a surface of the first semiconductor chip opposite to the surface on which the circuit is formed and a part of side surfaces of the first semiconductor chip are exposed to the outside of the encapsulation resin layer.